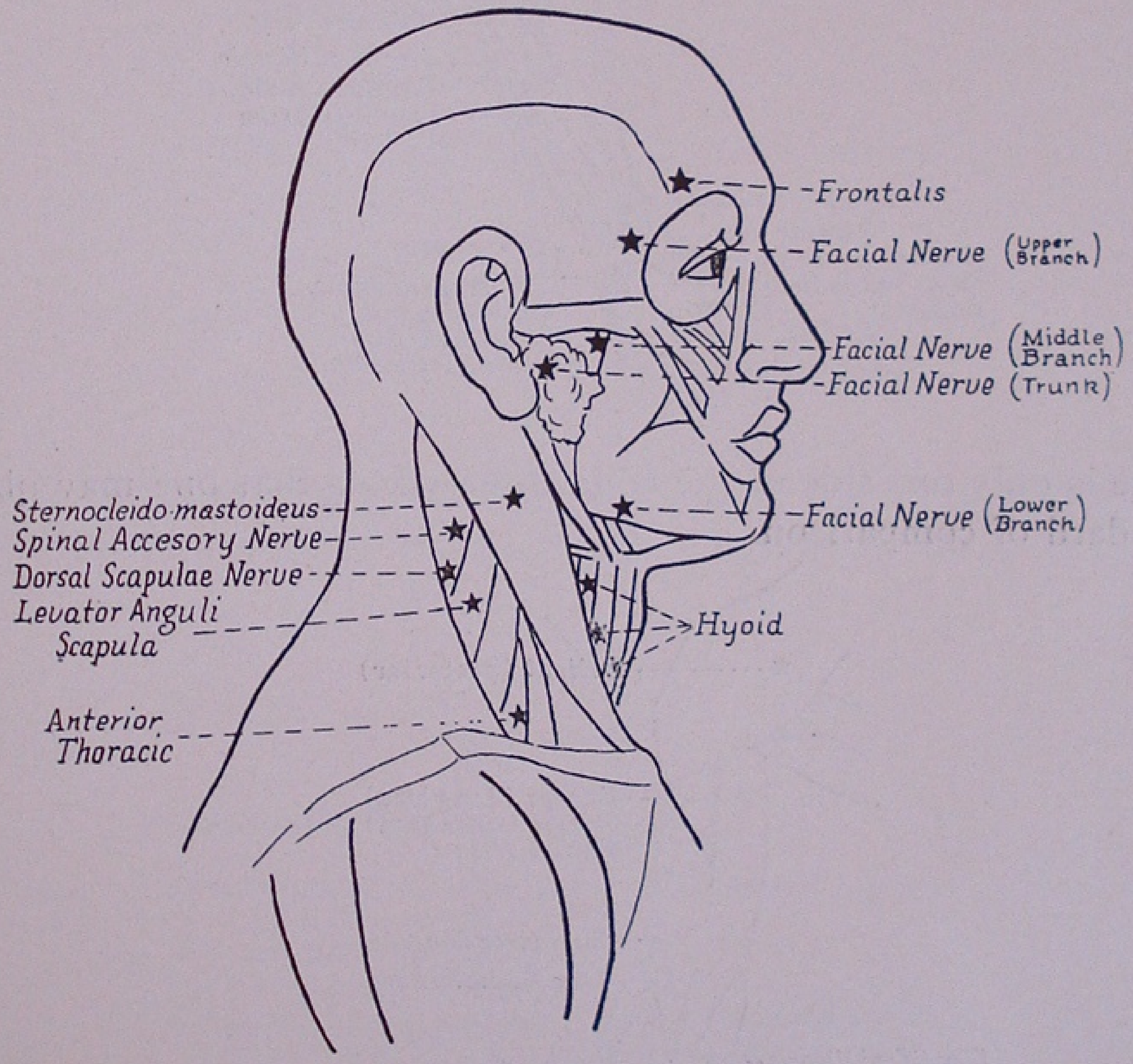
Use and Explanation of the Fischer Electro-Diagnostic Charts

The Fischer Galvanic and Contractile Currents Generator affords an excellent means for making correct electrical diagnosis to determine the degree of paralysis and reaction of degeneration.

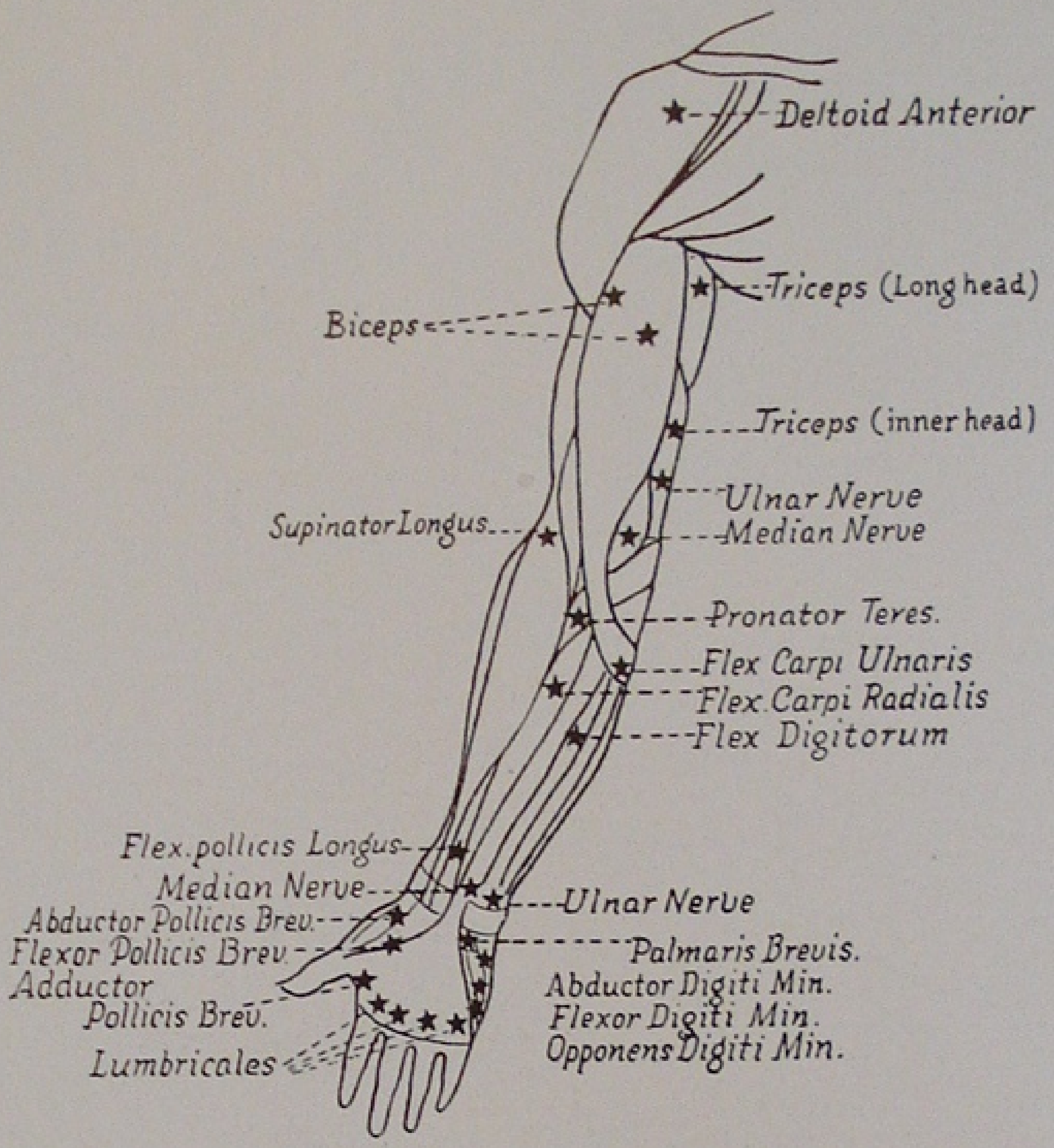
The following general rules must be observed.

The principal requirement of this method is to localize the current of required density and strength upon parts of the body marked for investigation, avoiding as much as possible unnecessary excitation of the neighboring structures.

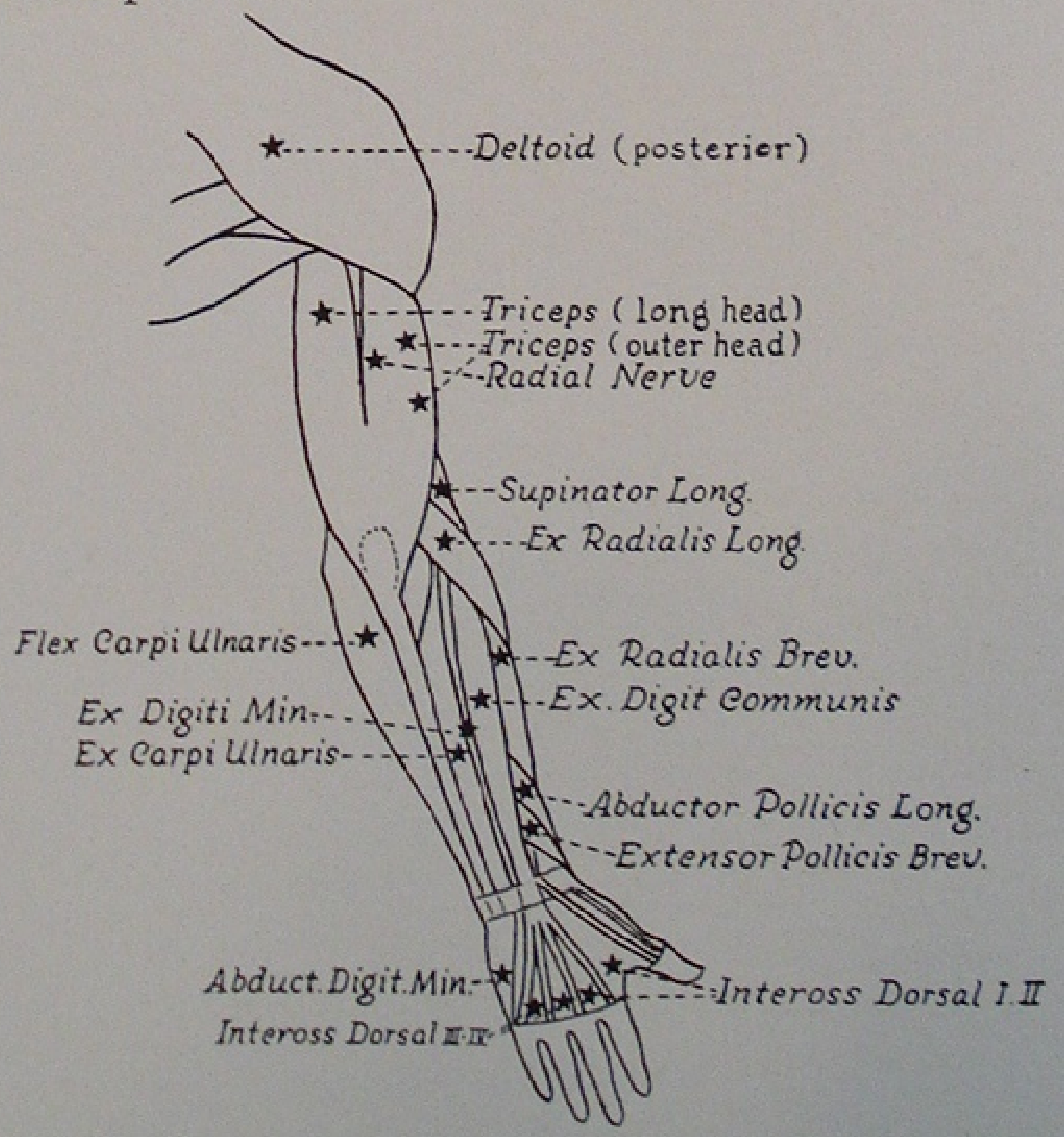


One pole or electrode only should be used for each muscle or nerve reaction expected, and while it is necessary to have a second electrode somewhere to complete the circuit, it is desirable to place this second electrode so as to eliminate effects at its point of contact. It is called the indifferent electrode. It should be much larger than the exciting electrode, which must be of the proper shape and size (usually one inch long by one-half inch wide) not to overlap adjacent tissue.

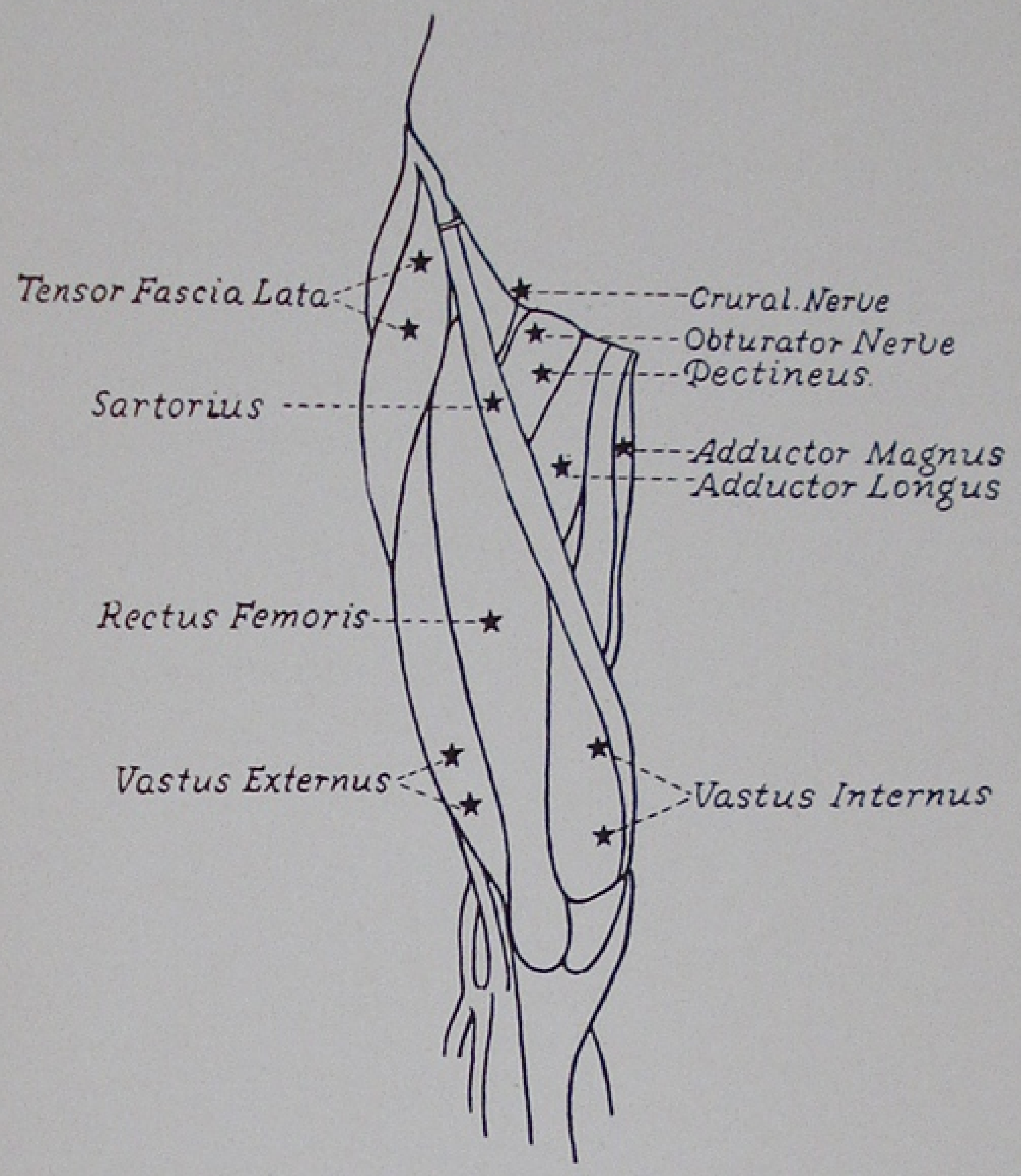
The operator should become fully familiar with his apparatus and practice by experimentation, possibly upon himself, so as to secure dexterity in manipulation. To secure accuracy in the interpretation of his results, it is advisable to test healthy parts, especially



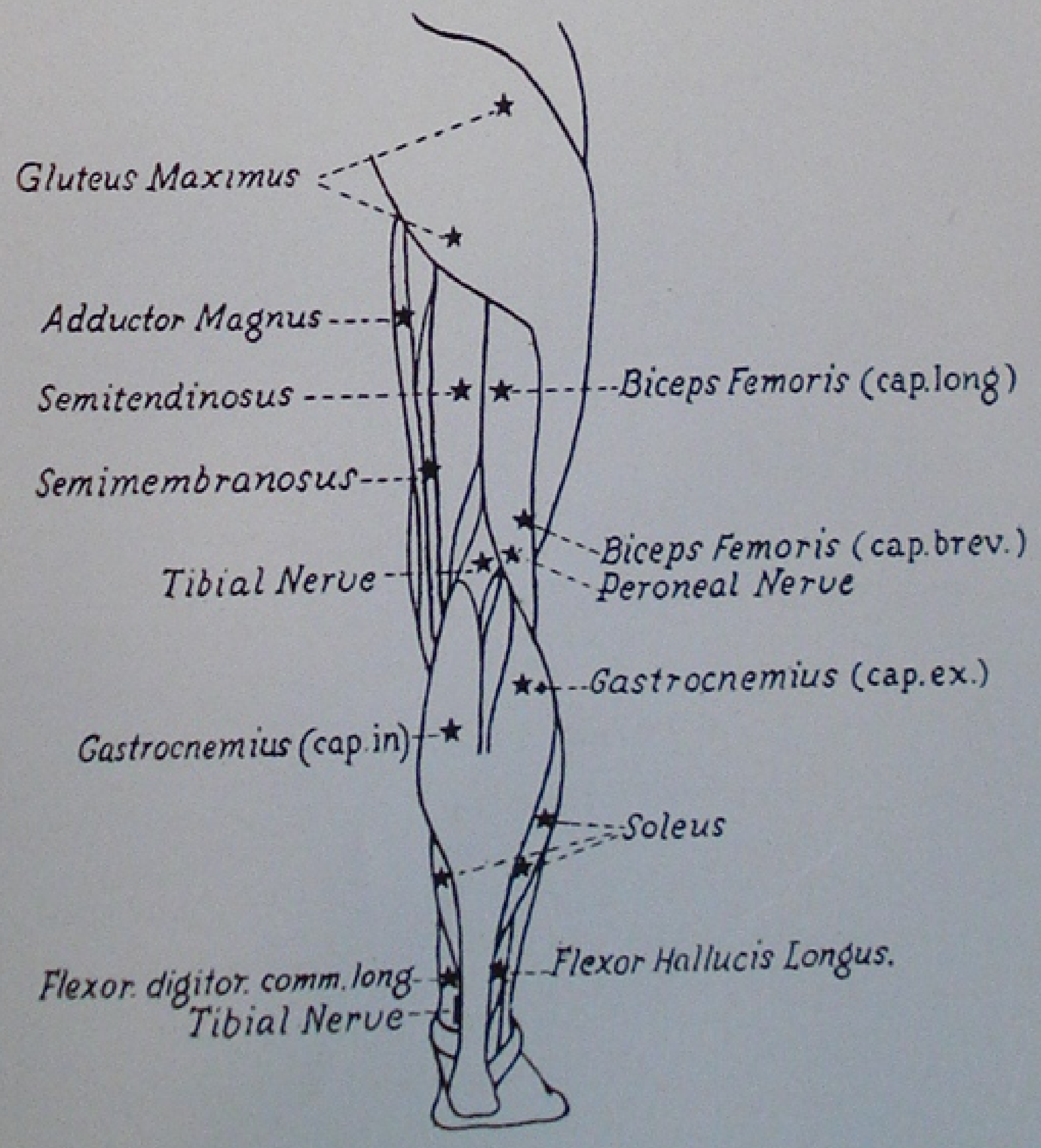
if there is only one side of the body diseased, so that one may obtain a standard of comparison.



It should always be kept in mind that deeper and more pronounced contractions are obtainable by the pulsating direct current than the others. To determine the strength of the current to be used, the resistance of the parts under examination indicated by the distance between the poles and the degree of paralysis must be considered.



You will observe in the charts reproduced, stars marking the motor points of the muscles and the exits of important nerve trunks, at which points electrical susceptibility is the greatest. Application to any of those points about the facial muscles would be more susceptible and less current, therefore, would be required than would be

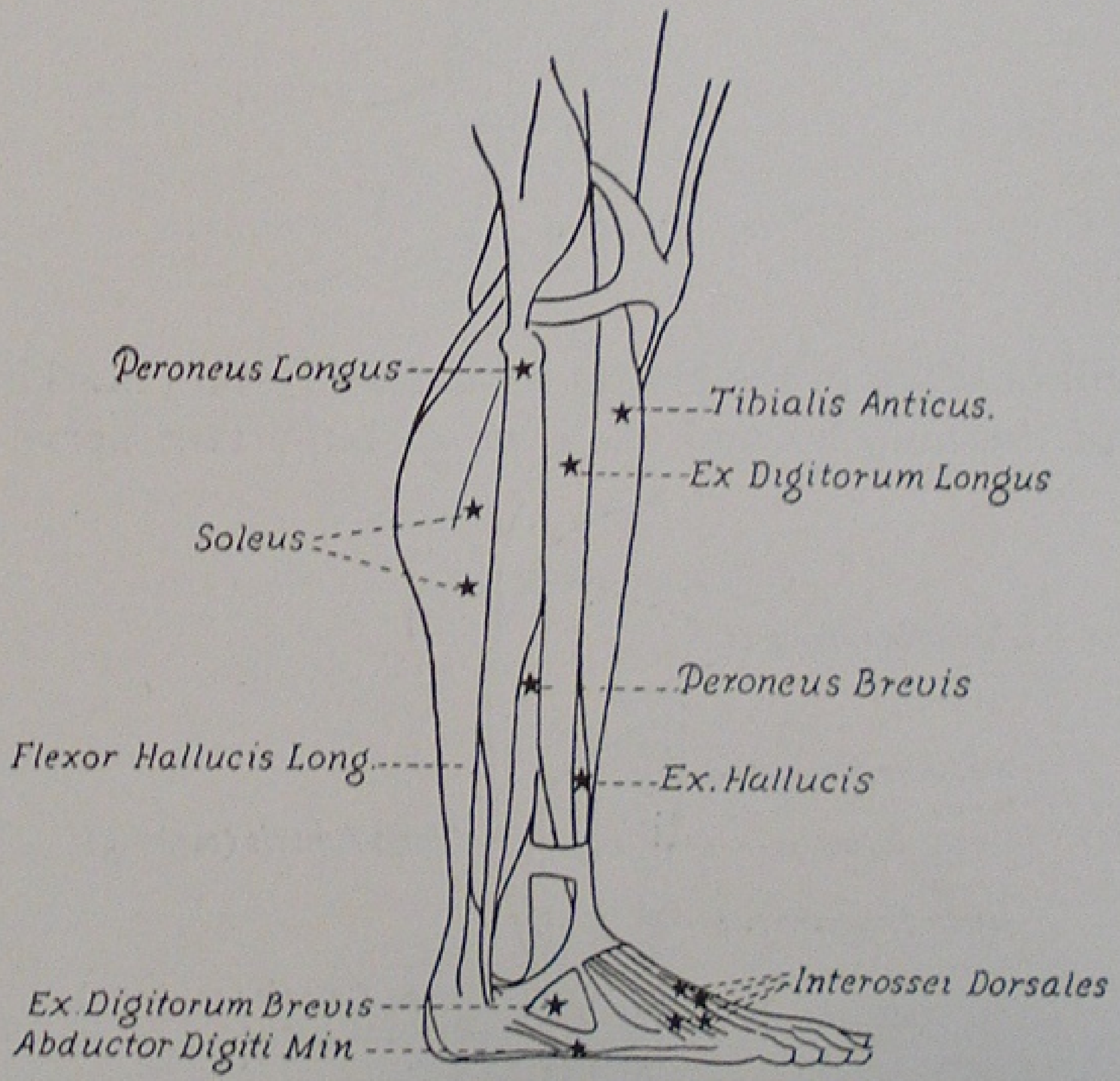


necessary in a similar exploitation of the deltoid muscles or along the sciatic nerve, or similar comparisons in different parts of the body. Reactions are different for different parts of the body, for different patients, also they are modified by disease, either increased or decreased. In sensory involvements, motor reactions may be produced without the patient experiencing much sensation, if any.

Electrical applications to a nerve exit or muscle motor point to determine the amount of excitation should be placed on the spot indicated, by means of the interrupter handle electrodes. This is the better method, although sudden, direct contact is also possible.

Do not move the active electrode in an indifferent manner over the area under examination, as that is not only unsatisfactory, but likely to give the patient an unpleasant muscle contraction.

For all the muscles about the face and neck, the indifferent or larger electrode may be placed over the lower cervical or upper dorsal vertebra and the various points determined from that.



In the examination of the arm the indifferent electrode may be placed over the nerve supply on the back and the active one over the nerve or muscle or set of muscles, under consideration. If one muscle only is involved, the indifferent electrode may be fastened at the upper insertion of the muscle and the active one applied at the motor point below.

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